

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**List of Plants for GERANYL-ACETATE**

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Acacia farnesiana</i>	Flower				Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980.
<i>Achillea millefolium</i>	Plant		36.0	-0.5241410325713916	--
<i>Aloysia citrodora</i>	Plant	15.0	126.0	-0.41568420886904717	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Apium graveolens</i>	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Artemisia salsoloides</i>	Shoot		50.0	-0.41824605893863187	V. Kaul, P. Weyerstahl, H. Wahlberg, H. Marschall, (1992); Volatile constituents of the essential oil and the absolute of <i>Artemisia salsoloides</i> Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
<i>Bursera delpechiana</i>	Wood	875.0	3000.0		--
<i>Cananga odorata</i>	Flower				--
<i>Cinnamomum camphora</i>	Leaf	0.0	600.0	2.2142631472159238	--
<i>Cinnamomum verum</i>	Bark				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Cistus ladaniferus</i>	Leaf	6.0	420.0	1.2281540533140953	--
<i>Citrullus colocynthis</i>	Petiole				--
<i>Citrus paradisi</i>	Leaf		10.0	-1.0179833272400691	--
<i>Citrus paradisi</i>	Fruit				Guenther, E., The Essential Oils, 6 volumes. D. van Nostrand, New York, 1948-1952.
<i>Citrus limon</i>	Essential Oil	12.0	310.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Citrus sinensis</i>	Fruit	0.0	0.1	-0.9446827484165164	--
<i>Citrus mitis</i>	Jf		2.5		--
<i>Citrus mitis</i>	Fruit Juice		2.5		--
<i>Citrus aurantium</i>	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
<i>Citrus reticulata</i>	Fruit	0.7	1.0	-0.9431637487853173	--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Citrus aurantium	Leaf		261.0	0.3570910203674803	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Citrus paradisi	Pericarp		5.0		--
Citrus medica	Pericarp				--
Citrus aurantiifolia	Fruit	30.0	310.0	-0.4216405420735619	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Citrus limon	Petiole		12.0		--
Coriandrum sativum	Fruit	52.0	988.0	0.7226725134299015	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cymbopogon nardus	Plant	188.0	750.0	0.33628310213387375	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Cymbopogon martinii	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Cymbopogon winterianus	Plant	120.0	556.0	0.10249839326437592	--
Cymbopogon citratus	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Cymbopogon parkeri	Plant	214.0	1589.0	1.347341714203506	Rizk, A.F.M., The Phytochemistry of the Flora of Qatar, Scientific and Applied Research Centre, University of Qatar, Kingprint, Richmond, UK, 1986.
Daucus carota	Shoot		265.0	0.0432946667727803	--
Elettaria cardamomum	Fruit	525.0	1500.0	1.586814525845496	Duke, J. A. and duCellier, J. L. 1993. CRC Handbook of Alternative Cash Crops. CRC Press. Boca Raton, FL 33431. 536 pp. US \$312.50.
Elsholtzia polystachya	Leaf		23.0	-0.9467643371249371	Mathela,C.S., Melkani,A.B., Bisht,J.C., Pant,A.K., Bestmann,H.J., Erler,J., Kobold,U., Rauscher,J. and Vostrowsky,O. 1992. Chemical Varieties of Essential Oils from Elsholtzia polystachya from Two Different Locations in India. Planta Medica 58: 376-379.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Elsholtzia blanda</i>	Shoot		930.0	1.4708508649034275	Bestman, H.J., Rauscher, J., Vostrowsky O., Pant, A.K., Dev. V., Perihar, R. and Mathela, C.S. 1992. Constituents of the Essential Oil of <i>Elsholtsia blanda</i> Benth. (Labiatae). <i>J. Ess. Oils Res.</i> 4: 121-124
<i>Elsholtzia polystachya</i>	Leaf		23.0	-0.9467643371249371	Mathela,C.S., Melkani,A.B., Bisht,J.C., Pant,A.K., Bestmann,H.J., Erler,J., Kobold,U., Rauscher,J. and Vostrowsky,O. 1992. Chemical Varieties of Essential Oils from <i>Elsholtsia polystachya</i> from Two Different Locations in India. <i>Planta Medica</i> 58: 376-379.
<i>Ficus carica</i>	Leaf				Blaschek, W., Hansel, R., Keller, K., Reichling, J., Rimpler, H., and Schneider, G. eds. 1998. <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Auflage Band 2 (A-K), 909 pp., (L-Z), 858 pp. Springer-Verlag, Berlin.
<i>Humulus lupulus</i>	Essential Oil				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Hypericum perforatum</i>	Plant	24.0	432.0	-0.046931008281076325	--
<i>Juniperus communis</i>	Fruit				--
<i>Laurus nobilis</i>	Leaf				Lawrence, B.M., <i>Essential Oils 1976-1977</i> , <i>Essential Oils 1978</i> , <i>Essential Oils 1979-1980</i> .
<i>Lavandula latifolia</i>	Plant				Lawrence, B.M., <i>Essential Oils 1976-1977</i> , <i>Essential Oils 1978</i> , <i>Essential Oils 1979-1980</i> .
<i>Lavandula x intermedia</i>	Plant	21.0	72.0	-0.4807583030904538	Lawrence, B.M., <i>Essential Oils 1976-1977</i> , <i>Essential Oils 1978</i> , <i>Essential Oils 1979-1980</i> .
<i>Lepechinia calycina</i>	Plant		5.0	-0.5614983829577546	Lawrence, B.M., <i>Essential Oils 1976-1977</i> , <i>Essential Oils 1978</i> , <i>Essential Oils 1979-1980</i> .
<i>Litsea glaucescens</i>	Shoot	20.0	30.0	-0.46118007993504234	Tucker, et al, EB46(1):21-24.1992
<i>Magnolia denudata</i>	Leaf				--
<i>Magnolia denudata</i>	Bark				--
<i>Magnolia denudata</i>	Flower				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Magnolia denudata	Twig				--
Magnolia denudata	Bulb				--
Melia azedarach	Wood				--
Melissa officinalis	Shoot	0.3	155.0	-0.1928424487074771	--
Mentha longifolia	Shoot	1.0	45.0	-0.4289795641877345	Fleisher, Z. and Fleisher, A. 1991. The Essential Oils from <i>Mentha longifolia</i> Growing in Sinai and Israel. <i>J. Ess. Oil Res.</i> , 3: 57.
Micromeria juliana	Leaf		200.0	0.02290960521186069	Kirimer, N., Ozek, T., and Baser, K.H.C. 1991. Composition of the Essential Oil of <i>Micromeria congesta</i> . <i>J. Ess. Oil Res.</i> , 3: 387-393.
Micromeria varia	Shoot		24.0	-0.47406028623396546	--
Micromeria varia	Shoot		0.0	-0.525581111429658	Pedro, L.G., et al. 1995. Composition of the Essential oil of <i>Micromeria varia</i> Benth. ssp. <i>thymoides</i> (Sol. ex Lowe) Perez var. <i>thymoides</i> , and endemic species of the Madeira Archipelago. <i>flav. &amp; Fragr. J.</i> 10(3): 199-202.
Monarda didyma	Leaf	7.0	13.0	-1.0015481756750388	--
Monarda didyma	Flower		4.0	-1.0	Flavour and Fragrance Journal, 6: 80.
Myristica fragrans	Seed	20.0	160.0		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Myrtus communis	Plant	8.0	12.0	-0.55306285222535	--
Myrtus communis	Leaf	8.0	250.0	0.29682879796236855	--
Nepeta racemosa	Shoot		145.0	-0.2143094592056823	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. <i>J. Ess. Oil Res.</i> 5: 215-7.
Nepeta racemosa	Shoot		145.0	-0.2143094592056823	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of <i>Nepeta racemosa</i> Lam. <i>J. Ess. Oil Res.</i> 5: 215-7.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Ocimum canum	Shoot				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
Ocimum basilicum	Leaf	11.0	84.0	-0.6125829219693176	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
Origanum vulgare	Plant		25.0	-0.5373968665794558	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum syriacum	Shoot		0.0	-0.525581111429658	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum syriacum	Shoot		15.0	-0.49338059568235015	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum vulgare	Plant	1.0	96.0	-0.4518364834364953	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Origanum vulgare	Plant		7.0	-0.5590882313199247	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum vulgare	Plant		11.0	-0.554267928044265	Sezik, E., Tumen, G., Kirimer, N., Ozek, T., and Baser, K.H.C. 1993. Essential Oil Composition of Four Origanum vulgare Subspecies of Anatolian Origin. J. Ess. Oil Res., 5: 425-431.
Origanum syriacum	Shoot		15.0	-0.49338059568235015	Fleisher, A. & Fleisher, Z. 1991. Chemical Composition of Origanum syriacum L. Essential Oil. J. Ess. Oil Res. 3: 121-123.
Origanum majorana	Plant	12.0	120.0	-0.4229146637825368	--
Pelargonium graveolens	Essential Oil				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Pelargonium citrosum	Shoot		7.0	-0.5105542040809143	Matsuda, B. M., et al. 1996. Essential Oil Analysis and Field Evaluation of the Citrosa Plant 'Pelargonium citrosum' as a Repellent Against Populations of Aedes Mosquitoes. J. Am. Mosq. Contr. Assoc. 12(1):69-74.
Pimenta dioica	Plant				--
Pimenta racemosa	Leaf	80.0	270.0	0.4063964750625717	--
Piper nigrum	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
Plectranthus coleoides	Shoot		65.0	-0.38604554319132406	Buchbauer, G., Jorovetz, L., Wasicky, M. and Nikiforov, A. 1993. Volatile Constituents of the Headspace and Essential Oil of Plectranthus coleoides Marginatus (Labiatae). J. Ess. Oil Res. 5: 311-313.
Polianthes tuberosa	Flower				--
Psoralea corylifolia	Seed				=ICMR(Indian Council of Medical Research).1976.Medicinal Plants of India.Vol.1.Indian Council of Med. Res.Cambridge Printing Works, New Delhi.487 pp;ICMR.1987.Medicinal Plants of India.Vol.2.Indian Council of Med. Res.Cambr. Printing Works,New Delhi.600pp
Pycnanthemum pycnanthemosides	Shoot	1053.0	1566.0	2.8361527325892792	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Rosa damascena	Essential Oil				--
Salvia dorisiana	Shoot	2.6	2.8	-0.5195703484901605	Tucker, A.O. & Maciarello, M.J. 1994. The Essential Oil of Salvia dorisiana Standley. J. Ess. Oil Res. 6: 97-8.
Salvia sclarea	Plant	20.0	1150.0	0.8183134296998488	Flavour and Fragrance Journal, 6: 154.
Satureja montana	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
Satureja hortensis	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
Sideritis pauli	Shoot		3.0	-0.5191410082801964	Burzaco, A., Velasco-Negueruela, A. and Perez-Alonso, M.J. 1992. Essential Oil Analysis of Sideritis pauli Pau. FFJ7: 47-8. 1992.
Telosma cordata	Flower		93.0	1.0	K. Furukawa, T. Arai, S. Hashimoto, (1993); Volatile components of Telosma cordata Merrill flowers, Flavour Fragr. J., Vo 8, 221-223.
Thymus mastichina	Plant		10.0	-0.5554730038631799	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Thymus capitatus	Shoot		0.0	-0.525581111429658	Biondi, D., Cianci, P., Geraci, C. and Ruberto, G. 1993. Antimicrobial Activity and Chemical Composition of Essential Oils from Sicilian Aromatic Plants. Flav. & Frag. J. 8: 331-7.
Thymus x citriodorus	Plant		100.0	-0.44701618016083555	Stahl-Biskup, E. and Holthuijzen, J. 1995. Essential oil and glycosidally bound volatiles of lemon-scented thyme, Thymus x citriodorus (Pers.) Schreb. Flav. & Fragr. J. 10: 225-229.
Thymus zygis	Shoot		28.0	-0.46547348203468336	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. Thymus zygis Oil: Its Effects on CCl4-Induced Hepatotoxicity and Free Radical Scavenger Activity. JEO5: 153-8.
Thymus longicaulis	Shoot		1315.0	2.2973307690843283	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.
Thymus vulgaris	Plant	0.0	3380.0	3.505632505880159	--
Thymus funkii	Shoot		0.0	-0.525581111429658	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of Thymus funkii Cousson. Flav. & Fragr. J. 10(6): 379-383.
Thymus longicaulis	Shoot		1315.0	2.2973307690843283	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of Thymus longicaulis C. Presl subsp. longicaulis in the same Population. J. Ess. Oil Res. 5: 291-5.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Thymus serpyllum</i>	Plant				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
<i>Thymus funkii</i>	Shoot		0.0	-0.525581111429658	Vila, R., et al. 1995. Composition and study of the variability of the essential oil of <i>Thymus funkii</i> Cousson. Flav. & Fragr. J. 10(6): 379-383.
<i>Thymus longicaulis</i>	Shoot		0.0	-0.525581111429658	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of <i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> in the same Population. J. Ess. Oil Res. 5: 291-5.
<i>Tilia</i> sp.	Flower				--
<i>Zingiber officinale</i>	Rhizome Essent. Oil				--
<i>Zingiber officinale</i>	Rhizome				--